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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,205	12/02/2003	Bridget Mary Pantaleo	67389-034	4686
20277	7590	10/24/2005	EXAMINER	
MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			HECK, MICHAEL C	
		ART UNIT	PAPER NUMBER	3623

DATE MAILED: 10/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	PANTALEO ET AL. Art Unit 3623
	10/725,205		
	Examiner Michael C. Heck		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 31 August 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-56 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

1. This Final Office Action is responsive to applicant's amendment filed 31 August 2005. Applicant amended claims 1, 9, 22, 30, 31, and 41-56. Currently, claims 1-56 are pending.

### ***Response to Amendment***

2. The 35 USC 101 rejection in the last Office Action for claims 1-21 and 41-56 have been overcome by the applicant's amendment to the claims.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-6, 9, 11, 15-16, 20-27, 30-31, 33, 37-45, 47, 49 and 53-56 have been considered but are moot in view of the new ground of rejection. Applicant asserts that Davis (Davis, How CTI is Changing Workforce Management: What are the Possibilities for your Call Center?, Telemarketing & Call Center Solutions, Vol. 14, Issue 8, February 1996, start p. 74 [PROQUEST]) fails to disclose identifying a plurality of subtasks that are needed to perform each of a plurality of tasks, as described in claim 1. Davis also fails to teach that the subtasks are of different types, as described in claim 1. Additionally, Applicant asserts Zweben et al. (U.S. Patent 6,216,109) does not calculate a work volume based on the identified subtasks and that the subtasks are of different types, as described in claim 1. In response, Wolfinger et al. (U.S. Patent 6,415,259) addresses the amended claims. The Examiner notes that Wolfinger et al. identifies activities when disclosing the system for

assigning tasks to a workforce. The Workforce Management Coalition (Workforce Management Coalition, Workforce Management Coalition Terminology and Glossary, Document Number WFMC-TC-1011, Issue 3.0, February 1999 [GOOGLE]) defines an activity to be a description of a piece of work that forms one logical step within a process. An activity may be a manual activity or a workflow (automated) activity and is synonymous with task (p. 13). Please see the 35 U.S.C. 103(a) rejections below.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims 1-6, 9, 11, 15-16, 20-27, 30-31, 33, 37-45, 47, 49 and 53-56** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfinger et al. (U.S. Patent 6,415,259) in view of Davis (Davis, How CTI is Changing Workforce Management: What are the Possibilities for your Call Center?, Telemarketing & Call Center Solutions, Vol. 14, Issue 8, February 1996, start p. 74 [PROQUEST]). Wolfinger et al. discloses a capacity planning method and system comprising:

- [Claim 1] receiving a plurality of tasks (Abstract and col.1, lines 9-15, Wolfinger et al. teach work progress tracking and management in which customers orders may be received and entered into the system. The system assigns tasks to a workforce and optimizes the scheduling of the tasks.)
- identifying a plurality of subtasks associated with each of the plurality of received tasks, wherein the identified subtasks are of different types and are

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needed to perform each respective task (col. 3, lines 62-67 and col. 4, line 65 to col. 5, line 33, Wolfinger et al. teach activities typically comprise several tasks. A customer order is a collection of activities. Activities can be linked by dependencies. Activities comprise tasks, which are either automatic or manual. Individual workers can perform different activities. The Examiner interprets activities to be synonymous with task, therefore activities (tasks) comprise subtasks and that different activities and dependencies of activities implies different tasks and subtasks.).

- accessing production rate information related to the amount of time or the number of staff needed to perform each of the identified subtasks (col. 6, lines 9-16 and col. 11, lines 57-61, Wolfinger et al. teach scheduling of each task takes into account dependencies, priority, duration, staff availability per job category (work pool), and material availability. A workflow template designer creates workflow templates. Such templates define the set of tasks necessary to fulfill an order. The template contains the duration of each task, the order in which each task need to be executed as well as task dependencies.).

Wolfinger et al. fail to teach calculating a work volume based on the identified subtasks and the production rate information. However, Wolfinger et al. does teach that the scheduling engine takes the template as input to online optimization, checks on the availability of resources in the resource pool and comes up with the "realistic workflow" linked to available resources, rather than the "best case" workflow, which was the starting point (col. 12, lines 8-12). Davis teaches predicting the number of TSRs (telephone sales representatives) required for the next few hours, based upon actual caller behavior (Para 22). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to incorporate the calculation of work volume of Davis with the teachings of Wolfinger et al. since Wolfinger et al. teach on-line scheduling of new and modified activities during the day as they occur (col. 3, lines 49-51). Quickly and accurately scheduling complex activities while taking into consideration the entire breathe of job to be performed develops an efficiency that

allows for greater customer and employee satisfaction. Wolfinger et al. teach a swift reaction to changing circumstances (preferably transparent to the customer) can increase a firm's competitive advantage in the market by filling orders when other firms cannot (col. 1, lines 26-29). Davis teaches providing the right number of telephone sales representatives (TSRs) with the right skills and attitudes to meet caller demand in every period of the day. To attain "just right" staffing requires adjustments in real-time according to real circumstances (Para 2 and 21). The problem being solved by Wolfinger et al. and Davis is how to take into consideration all the variables in generating a schedule and accurately come to a solution that matches the demand in a quick manner so managers can respond to the every changing requirement. Therefore, Wolfinger et al. in combination with Davis will have a reasonable expectation of success since they are trying to solve the same problem. Both Wolfinger et al. and Davis teach using workforce management techniques in the telecommunications industry therefore there is a motivation or suggestion to combine. A reasonable expectation of success exists since both Wolfinger et al. and Davis are optimizing resource allocations to satisfy the customers demand. Wolfinger et al. in combination with Davis teach all the claim limitations as indicated above.

- [Claim 2] the production rate information includes the amount of time needed to perform respective identified subtasks (Davis: Para 5, 19 and 20, Davis teaches managers need to know how many minutes of each particular skill or knowledge is needed every half-hour. Forecasting demand includes call-handling times and TSR staffing levels required by interval. Scheduling TSRs include determining when TSRs perform tasks other than answering calls. Wolfinger et al.: col. 6, lines 9-16 and col. 11, lines 57-61, Wolfinger et al. teach scheduling of each task takes into account dependencies, priority, duration, staff availability per job category (work pool), and material availability. A workflow template designer creates workflow templates. Such

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templates define the set of tasks necessary to fulfill an order. The template contains the duration of each task, the order in which each task need to be executed as well as task dependencies.).

- [Claim 3] the production rate information includes the number of each identified subtasks that can be performed per one time unit (Davis: Para 4, 19 and 20, Davis teaches CTI allows more accurate targeting of incoming calls to specific TSRs with specialized knowledge or skills. Capacity management involves forecasting TSR staffing levels required by interval (for example, every half hour) for each TSR group and then scheduling the TSRs. Wolfinger et al.: col. 6, lines 29-46, Wolfinger et al. teach a time slot is a period of time in which activities can be processed. In general, one task has a unique time slot. If a task is longer than the time slot, the task is assigned to several time slots.).
- [Claim 4] the time unit is an hour (Davis: Para 22, Davis teaches the workforce management system provides tools to predict the number of TSRs required for the next few hours.).
- [Claim 5] the production rate information is obtained from a database or by observation (Davis: Para 19, Davis teaches workforce management systems can track years of history. Implicitly, a database is used.).
- [Claim 6] the work volume is calculated as the number of time units needed to perform the identified subtasks (Davis: Para 19, Davis teaches capacity management involves forecasting call volume, call handling times and TSR staffing levels required by interval (for example every half hour) for each TSR group. Workforce management systems tracks years of history and performs the necessary calculations to help managers forecast accurately.).
- [Claim 9] accessing staff information (Davis: Para 20, Davis teaches scheduling TSRs to includes determining when shifts start and end, when breaks and lunches occur. The examiner interprets the above information as staff information.);
- determining staff availability based on the staff information (Davis: Para 22, Davis teaches workforce management systems provide tools to compare actual TSR availability to the schedule.); and
- generating a capacity report based on the work volume and the staff availability (Davis: Para 23, Davis teaches workforce management systems provide extensive reporting that allows managers to compare reality to plans), wherein the staff information includes at least one of information related to the number of employees, capability of a specific employee to perform the

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subtasks, information related to exempt status of employees, information related to staff outage, information related to work time that cannot be used to perform the subtasks, and information related to business days within a specific period of time (Davis: Para 16, Davis teaches workforce management systems help managers determine the number of TSRs needed to meet anticipated calling demand effectively and affordably.).

- [Claim 11] the step of calculating extended staff availability by considering extended work hours; and wherein the capacity report is generated further based on the extended staff availability (Davis: Para 23, Davis teaches workflow management systems provide extensive reporting that allows managers to compare reality with plans to include answering questions such as how well did we do in adjusting our schedule to respond to what actually happened during the day.).
- [Claim 15] the work volume is calculated as the amount of time needed to perform the subtasks; and the staff availability is calculated as the total amount of time that employees can perform the subtasks within a specific period of time (Davis: Para 20, Davis teaches management involves scheduling TSRs – determining when shift start and end, when breaks and lunches occur and when TSRs perform tasks other than answering calls. Good workforce management systems offer sophisticated algorithms that factor individual TSR availabilities and work shift preferences into schedule development.).
- [Claim 16] the total amount of time that employees can perform the subtasks within the specific period of time is calculated by using the equation of: (the number of employees) · (the number of standard work hours per day) · (the number of business days within the specific period of time) - (the amount of time lost due to staff outage within the specific period of time) - (the amount of work time that cannot be used to perform the subtasks within the specific period of time) (Davis: Para 20 and 21, Davis teaches scheduling agents. Scheduling TSRs involves determining shift start and end, when breaks and lunches occur and when TSRs perform task other than answering calls (for example, outbound calling, training, meeting, research). Forecasting and scheduling are performed days or weeks in advance. Inherently, the equation is used to schedule the number of TSRs required to handle the forecasted demand.).
- [Claim 20] the staff availability is calculated based on at least one of the number of employees, the information related to staff outage, the information related to the amount of work time that cannot be used to perform the subtasks, the information related to business days, and the amount of defined work hours per day (Davis: Para 20 and 21, Davis teaches scheduling agents.

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Scheduling TSRs involves determining shift start and end, when breaks and lunches occur and when TSRs perform task other than answering calls (for example, outbound calling, training, meeting, research). Forecasting and scheduling are performed days or weeks in advance. Inherently, the forecast and schedule are calculated.).

- [Claim 21] the information related to the amount of work time that cannot be used to perform the subtasks depends on at least one of the position, the identity, the exempt status, the handling capability, and the outage status of the respective employee (Davis: Para 20 and 21, Davis teaches scheduling agents. Scheduling TSRs involves determining shift start and end, when breaks and lunches occur and when TSRs perform task other than answering calls (for example, outbound calling, training, meeting, research). Forecasting and scheduling are performed days or weeks in advance.).
- [Claim 31] accessing staff information (Davis: Para 20, Davis teaches scheduling TSRs to includes determining when shifts start and end, when breaks and lunches occur. The examiner interprets the above information as staff information.);
- determining staff availability based on the staff information (Davis: Para 22, Davis teaches workforce management systems provide tools to compare actual TSR availability to the schedule.); and
- generating a capacity report based on the work volume and the staff availability (Davis: Para 23, Davis teaches workforce management systems provide extensive reporting that allows managers to compare reality to plans); and
- the staff information and the information related to the plurality of task are obtained from at least one of the data storage device and a remote data processing system connected to the data processing system via a network (Wolfinger et al.: col. 8, lines 27-36 and col. 9, lines 23-26, Wolfinger et al. teach a three tier computer system made up of a personal computer client system connected to an application server, and a database server. The application server is where scheduling, workflow, and calendar functions take place. The database server is where the data is stored. The typical system is installed on either a local area network or wide area network supporting hundreds of clients and tens of application servers and database servers.).

**Claims 22-27, 30, 33, 37-45, 47, 49 and 53-56** substantially recites the same limitations as that of claims 1-6, 9, 11, 15-16 and 20-21 with the distinction of the recited method

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being a system and a machine-readable medium. Hence the same rejection for claims 1-6, 9, 11, 15-16 and 20-21 as applied above applies to claims 22-27, 30, 33, 37-45, 47, 49 and 53-56.

6. **Claims 7-8, 10, 19, 28-29, 32, 46 and 48** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfinger et al. (U.S. Patent 6,415,259) in view of Davis (Davis, How CTI is Changing Workforce Management: What are the Possibilities for your Call Center?, Telemarketing & Call Center Solutions, Vol. 14, Issue 8, February 1996, start p. 74 [PROQUEST]) and further in view of Reynolds (Reynolds, Automating for Better Workforce Management, Call Center Solutions, March 1999, p. 74-80 [PROQUEST]). As to **claim 7**, Wolfinger et al. and Davis disclose a capacity planning method and system but failed to teach the work volume is calculated as the number of fulltime employees needed to perform the identified subtasks, based on standard work hours per day. Reynolds teaches a telephone traffic engineering technique is used to determine the required number of staff based on the forecast workload. "Bodies in chairs" staff requirements along with nonproductive time estimates (for breaks, training, meetings, etc.) are used to determine a scheduling requirement for each half-hour or quarter hour period. A set of optimal schedules is then created based on these requirements and a call center's unique scheduling rules and constraints. These schedules are then assigned to staff based on shift bid rules and employee preferences. The savings associated with more efficient scheduling can take many forms, including reduced overall staff hours, reduced need for overtime and identification of overstaffed

periods (p. 76-77). The examiner interprets standard work hours per day per staff member is used since overtime avoidance is a factor in calculating savings. It would have been obvious to one of ordinary skill in the art to include the calculated staffing requirements of Reynolds with the teachings of Wolfinger et al. and Davis because Davis teaches workforce management system provide the right number of telephone sales representatives with the right skills and attitudes to meet caller demand in every period of every day (Para 1 and 2). Meeting customer demands to ensure customer satisfaction at minimal cost is a goal for profit-oriented companies. Wolfinger et al. teach a swift reaction to changing circumstances (preferably transparent to the customer) can increase a firm's competitive advantage in the market by filling orders when other firms cannot (col. 1, lines 26-29). Davis teaches providing the right number of telephone sales representatives (TSRs) with the right skills and attitudes to meet caller demand in every period of the day. To attain "just right" staffing requires adjustments in real-time according to real circumstances (Para 2 and 21). Getting the right number of staff in place to answer calls is critical to call center success and profitability (Reynolds: p. 74). Matching and scheduling the right resources with the customer demand ensures the customers requirements will be met, therefore, minimizing cost and ensuring customer satisfaction. Wolfinger et al., Davis and Reynolds teach using workforce management techniques in the telecommunications industry therefore there is a motivation or suggestion to combine. A reasonable expectation of success exists since Wolfinger et al., Davis and Reynolds are optimizing resource allocations to satisfy the customer's demand. Wolfinger et al. in combination

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with Davis and further in combination with Reynolds teach all the claim limitations as indicated above.

- [Claim 8] the standard work hours per day are configurable (Davis: Para 20, Davis teaches the second step in capacity management involves scheduling TSRs – determining when shift starts and end, when breaks and lunches occur and when TSRs perform tasks other than answering calls. Wolfinger et al.: col. 6, lines 1-4 and col. 7, line 28 to col. 8, line 27, Wolfinger et al. teach a calendar defines the times when a workforce resource fill capacity in a time slot. There are periodic times of unavailability like weekends, shifts, and single times of unavailability like holidays, public holidays, sick leave, etc. A time line having five different time zones are related to the optimization process. A frozen zone may be set at one day. In a stability zone, the schedule engine can assign tasks to time slots, which have gaps that are idle timers when no activity is scheduled. The length of each zone is configurable and can be changed at any time.).
- [Claim 10] the information related to the number of employees includes at least one of the number of full-time employees, the number of other types of employees, the total hours worked by other types of employees expressed as a full-time employee equivalent; and the other types of employees include at least one of part-time employees, temporary employees, interns, and borrowed staff (Davis: Para 12, Davis teaches answering the question of whether or not the manager will have enough TSRs to answer the calls. Reynolds: P. 76, Table 1 and 3, Reynolds teaches a mixture of full- and part-time staff and shows the staff cost savings and annual staff cost.).
- [Claim 19] the capacity report includes a cost analysis (Reynolds: Table 1, 2, 3, and 4, Reynolds teaches calculating savings.).

**Claims 28-29, 32, 46 and 48** substantially recite the same limitations as that of claims 7-8 and 10 with the distinction of the recited method being a system and a machine-readable medium. Hence the same rejection for claims 7-8 and 10 as applied above applies to claims 28-29, 32, 46 and 48.

7. **Claims 12-13, 17-18, 34-35 and 50-51** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfinger et al. (U.S. Patent 6,415,259) in view of Davis

(Davis, How CTI is Changing Workforce Management: What are the Possibilities for your Call Center?, Telemarketing & Call Center Solutions, Vol. 14, Issue 8, February 1996, start p. 74 [PROQUEST]) and further in view of Randhawa et al. (Randhawa et al., A Microcomputer-based Data Management and Capacity-planning System, International Journal of Operations & Production Management, Vol. 10, Issue 5, 1990, p. 52-61 [EBSCO]). As to **claim 12**, Wolfinger et al. and Davis disclose a capacity planning method and system but fail to teach the extended staff availability is calculated based on a plurality of overtime scenarios or a plurality of expanded staff scenarios. Randhawa et al. teach the scheduling module enables users to interactively change the initial schedule to achieve a balance workload over the specified time horizon (p. 55). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to include the interactive change capability of Randhawa et al. with the teachings of Wolfinger et al. and Davis since Davis teaches by integrating CTI technology with an effective workforce management system and ensuring the system is properly planned, implemented and affordable, call center managers can ensure they will have enough TSRs to answer calls, ensure the TSRs have the proper skills, and ensure the TSRs will be in the proper frame of mind (Para 12-13). Meeting customer demands to ensure customer satisfaction at minimal cost is a goal for profit-oriented companies. Wolfinger et al. teach a swift reaction to changing circumstances (preferably transparent to the customer) can increase a firm's competitive advantage in the market by filling orders when other firms cannot (col. 1, lines 26-29). Davis teaches providing the right number of telephone sales representatives (TSRs) with the right skills

and attitudes to meet caller demand in every period of the day. To attain “just right” staffing requires adjustments in real-time according to real circumstances (Para 2 and 21). The scheduling system helps the management in planning for steady capacity utilization, and is flexible enough to develop new scenarios if the conditions in the system change (Randhawa et al., p. 61). Matching and scheduling the right resources with the customer demand ensures the customers requirements will be met, therefore, minimizing cost and ensuring customer satisfaction. Wolfinger et al., Davis and Randhawa et al. teach a capacity planning and/or optimization system. A reasonable expectation of success exists since Wolfinger et al., Davis and Randhawa et al. are optimizing (balancing) resource allocations to satisfy the demand. Wolfinger et al. in combination with Davis and further in combination with Randhawa et al. teach all the claim limitations as indicated above.

- [Claim 13] the capacity report is generated based on a first comparison between the work volume and the staff availability, and a second comparison between the work volume and the extended staff availability (Randhawa et al.: p. 55, Randhawa et al. teach the scheduling module produces graphs and reports for the schedules that are generated.).
- [Claim 17] the step of calculating extended staff availability by considering extended work hours; and wherein the capacity report is generated further based on the extended staff availability (Randhawa et al.: p. 55, Randhawa et al. teach the scheduling module enables users to interactively change the initial schedule to achieve a balance workload over the specified time horizon. The scheduling module produces graphs and reports for the schedules that are generated.).
- [Claim 18] the extended staff availability is calculated based on a plurality of over time scenarios or on a plurality of expanded staff scenarios (Randhawa et al.: p. 55, Randhawa et al. teach the scheduling module enables users to interactively change the initial schedule to achieve a balance workload over the specified time horizon.).

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**Claims 34-35 and 50-51** substantially recite the same limitations as that of claims 12-13 with the distinction of the recited method being a system and a machine-readable medium. Hence the same rejection for claims 12-13 as applied above applies to claims 34-35 and 50-51.

8. **Claims 14, 36 and 52** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfinger et al. (U.S. Patent 6,415,259) in view of Davis (Davis, How CTI is Changing Workforce Management: What are the Possibilities for your Call Center?, Telemarketing & Call Center Solutions, Vol. 14, Issue 8, February 1996, start p. 74 [PROQUEST]) and in view of Randhawa et al. (Randhawa et al., A Microcomputer-based Data Management and Capacity-planning System, International Journal of Operations & Production Management, Vol. 10, Issue 5, 1990, p. 52-61 [EBSCO]) as applied to claim 1. As to **claim 14**, the examiner takes Official Notice that the step of generating warnings based on the first comparison and the second comparison. For example, in generating an EXCEL spread sheet, a user can identify a calculation and highlight areas of concern by having the spreadsheet indicate the results in a different color, therefore, alerting the user that an issue may exist or a decision point has been reached. It would have been obvious to one of ordinary skill in the capacity planning art to use the alert system of EXCEL with the teachings of Wolfinger et al., Davis and Randhawa et al. since Randhawa et al. teach interactively changing the initial schedule to achieve a balance workload (p. 55). Capacity planning understands demand versus resources and allows the user to plan ahead to balance

the load. Unbalanced situation require action whether they be on the demand or resource side of the equation. Visibly highlighting the variances alerts the user that action is required, therefore, ensuring the user can accurate plan ahead for a balance load.

**Claims 36 and 52** substantially recite the same limitations as that of claim 14 with the distinction of the recited method being a being a system and a machine-readable medium. Hence the same rejection for claim 14 as applied above applies to claims 36 and 52.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Michael C. Heck whose telephone number is (571) 272-6730. The Examiner can normally be reached Monday thru Friday between the hours of 8:30am - 4:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R. Hafiz can be reached on (571) 273-6729.

Any response to this action should be mailed to:

**Director of the United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, Virginia 22313-1450**

Or faxed to:

**(571) 273-8300** [Official communications; including After Final communications labeled "Box AF"]

**(571) 273-6730** [Informal/Draft communication, labeled "PROPOSED" or "DRAFT"]

*mch*  
mch

18 October 2005

*MH*  
TARIQ R. HAFIZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600